10/550835 JC09 Rec'd PCT/PTO 23 SEP 2005

Partial Translation of JP 1989-172800

Publication Date: December 7, 1989

Application No.: 63(1988)-69188

Filing Date: May 25, 1988

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From "Embodiment" in page 8 to the second last line in page 9
[Embodiments]

One embodiment of the present invention is described below by reference to Fig. 2. Fig. 2 (a) is a sectional side view of an ultrasonic probe, and Fig. 2 (b) is an oblique perspective view of a conversion element shown in Fig. 2 (a). The same numeral indicates the one and same component through all the figures. The numerals in Fig. 2 corresponding to those in Fig. 1 are surrounded by single-chained lines.

As shown in the drawing, an electrode 11b provided on a plane 13a of a piezoelectric element 10 of the conversion element 1b is formed up to a peripheral surface 15b.

An electrode 12b provided on a plane 14a is formed of a little smaller diameter than the inside diameter of a case 3b. A lead wire 6a is connected to a joint 17 of the electrode 12b by soldering or bonding.

Additionally, an electrode 7a of conductive metal-coated pattern is

formed by plating or the like on a stage portion 30b and an inner surface 31 of the case 3b.

This embodiment is assembled by engaging the peripheral surface 15b of the conversion element 1b into the stage portion 30b of the case 3b and welding the two by soldering or the like. The electrode 11b and the electrode 7a, and the electrode 7a and a lead wire 5a are welded together, respectively.

Thus, the lead wires 5a and 6a are used in connection with a cable not shown. In this case, the area of a connecting portion of the electrode 7a can be set in a desired size, which makes it easy to carry out welding of the lead wire 5a.

(a) Sectional side view

Structural drawing showing an embodiment of the present invention

Fig. 2 (1)

